

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended)      An X-ray apparatus having

-----an X-ray source,

-----an X-ray detector,

-----a C-arm assembly on which the X-ray source and the X-ray detector are arranged at least substantially opposite one another, the C-arm assembly being arranged so as to be rotatable about a propeller axis and an axis of rotation, which axes extend perpendicularly to one another,

-----marker arrangements mounted on the X-ray source and the X-ray detector respectively, and

-----a camera arrangement for detecting the marker arrangements to enable the positions of the X-ray source and the X-ray detector to be determined, the camera arrangement being arranged on the C-arm assembly operatively associated with the C-arm assembly so as to remain stationary when the C-arm assembly rotates about the axis of rotation.

2. (currently amended)      The X-ray apparatus as claimed in claim 1, wherein the camera arrangement is arranged on a part of the C-arm assembly whose position does not change if when the C-arm assembly is rotated about the axis of rotation.

3. (previously presented) The X-ray apparatus as claimed in claim 2, wherein the camera arrangement is arranged on the axis of revolution of the C-arm assembly that extends along the propeller axis.

4. (previously presented) The X-ray apparatus as claimed in claim 2, wherein the camera arrangement is so arranged that, when the C-arm assembly rotates about the propeller axis, it too performs the rotation.

5. (previously presented) The X-ray apparatus as claimed in claim 1, wherein the camera arrangement is arranged on a part of the C-arm assembly whose position changes if the C-arm assembly is rotated about the axis of rotation.

6. (previously presented) The X-ray apparatus as claimed in claim 5, wherein the camera arrangement is arranged on the C-arm, which C-arm can be traversed about the axis of rotation when the C-arm assembly is rotated and carries the X-ray source and the X-ray detector, the camera arrangement being in particular arranged centrally on the C-arm between the X-ray source and the X-ray detector.

7. (previously presented) The X-ray apparatus as claimed in claim 5, wherein a further marker arrangement is mounted on the camera arrangement and in that the X-ray apparatus also has a fixed camera arrangement for detecting this marker arrangement, which latter is mounted on the

camera arrangement arranged on the C-arm assembly to allow the position of this camera arrangement to be determined.

8. (previously presented) The X-ray apparatus as claimed in claim 1, wherein the camera arrangement mounted on the C-arm assembly has two cameras, the first camera detecting the marker arrangement mounted on the X-ray source and the second camera detecting the marker arrangement mounted on the X-ray detector.

9. (previously presented) The X-ray apparatus as claimed in claim 1, wherein a computing unit is provided for the correction by calculation of the image data obtained, by reference to the data obtained relating to the positions of the X-ray source and the X-ray detector.

10. (currently amended) An X-ray apparatus comprising:

- an X-ray source ~~including having~~ a first marker arrangement;
- an X-ray detector ~~including having~~ a second marker arrangement;
- a C-arm assembly on which ~~said the~~ X-ray source and ~~said the~~ X-ray detector are mounted; and
- a camera arrangement ~~mounted to a portion of said~~ operatively associated with the C-arm assembly so as to remain stationary when the C-arm is rotated about an axis, and moves when the C-arm assembly is rotated about another axis.

11. (currently amended) The X-ray apparatus of claim 10, wherein the portion of the C-arm assembly to which the camera arrangement is ~~mounted~~operatively associated is fixed.

12. (currently amended) The X-ray apparatus of claim 10, wherein the portion of the C-arm assembly to which the camera arrangement is ~~mounted~~operatively associated is moveable.

13. (currently amended) The X-ray apparatus of claim 12 further comprising a second camera arrangement ~~mounted~~operatively associated to either a fixed or moveable portion of said the C-arm assembly.

14. (currently amended) An X-ray apparatus comprising:

- an X-ray source ~~including~~having a first marker;
- an X-ray detector ~~including~~having a second marker;
- a C-arm assembly ~~on to which said the~~ X-ray source and ~~said the~~ X-ray detector are ~~mounted~~operatively associated;
- a camera arrangement ~~positioned on said~~operatively associated with the X-ray apparatus ~~such so~~ that the field of view between the camera arrangement and the first marker and the field of view between the camera arrangement and the second marker are not obstructed by a patient when ~~said the~~ C-arm assembly moves relative to ~~said the~~ patient.

15. (currently amended) The X-ray apparatus of claim 14 further comprising a means for determining the position of ~~said the~~ camera arrangement.